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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,861	09/24/2003	Dong-Ki Lee	12279-007002	4394
26161 7590 01/09/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER DUNSTON, JENNIFER ANN	
			ART UNIT	PAPER NUMBER
			1636	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/09/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,861	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Jennifer Dunston	<b>Art Unit</b> 1636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3,5,6,13-19 and 22-41 is/are pending in the application.
- 4a) Of the above claim(s) 13,15-19,28,29 and 32-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,5,6,22-27 and 36-41 is/are allowed.
- 6) ☒ Claim(s) 14,30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is in response to the amendment, filed 9/23/2006, in which claims 1, 4, 7-12 and 20-21 were canceled; claims 2-3, 5-6, 14-19 and 30-31 were amended; and claims 36-41 were newly added. Currently, claims 2-3, 5-6, 13-19 and 22-41 are pending.

Applicant's arguments have been thoroughly reviewed, but are not persuasive for the reasons that follow. Any rejections and objections not reiterated in this action have been withdrawn. **This action is FINAL.**

### ***Election/Restrictions***

Applicant elected Group I without traverse in the reply filed on 12/22/2005.

Claims 13, 15-19, 28, 29 and 32-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/22/2005. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. In the instant case, all product claims are not found allowable.

Currently, claims 2-3, 5, 6, 14, 22-27, 30-31 and 36-41 are under consideration.

### ***Priority***

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119 as follows:

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The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/338,441, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The prior-filed provisional application does not provide teach how to make and use an isolated transcription factor that comprises at least one zinc finger domain, wherein the presence of the transcription factor in a cell can alter the differentiation state of the cell. The provisional application does not describe proteins that comprise at least one zinc finger domain and can alter the differentiation state of a cell. The specification of the provisional application does not describe zinc fingers that can induce a neuronal phenotype in a vertebrate cells such as a neuroblastoma cell. The specification of the provisional application does not describe a protein comprising a first, second and third zinc finger domains, wherein the contacting residues of the first, second, and third domains at positions -1, 2, 3, and 6 of each domain respectively correspond to the motifs: QSNR, ZSNK, and CSNR, such as the zinc finger array of SEQ ID NO: 2.

Claims 1-6, 14, 22-27 and 30-31 have an effective filing date of 4/26/2002.

***Response to Arguments - Double Patenting***

The rejection of claims 1 and 14 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 and 14-19 of copending Application No. 10/538,041, as evidenced by Cross et al, has been withdrawn in view of Applicant's amendment to the claims in the reply filed 9/23/2006. It is noted that Applicant should be aware of the 10/538,041 application. The 10/538,041 has an inventor (Jin-Soo Kim) and assignee (Toolgen, Inc.) in common with the instant application.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14, 30 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The specification envisions embodiments where the cell is present or intended to be present in a human being, which is non-statutory subject matter. As such, the recitation of the limitation "non-human" would be remedial. See 1077 O.G. 24, April 21, 1987. This rejection was made in the Office action mailed 3/10/2006.

***Response to Arguments - 35 USC § 101***

With respect to the rejection of claims 14, 30 and 31 under 35 U.S.C. 101, because the claimed invention is directed to non-statutory subject matter, Applicant's arguments filed 8/9/2006 have been fully considered but they are not persuasive.

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The response asserts that the amendment of claims 14, 30 and 31 to recite “recombinant cells” overcomes the rejection of record. At page 89, the specification states, “recombinant cells that express or can express an artificial zinc finger protein...can be used for replacement therapy in a subject...into a human.” Thus, the specification clearly envisions embodiments where the cell is present in a human being, which is non-statutory subject matter. It would be remedial to amend the claims to recite “non-human” or “isolated” to overcome the rejection.

For these reasons, and the reasons made of record in the previous office actions, the rejection is maintained.

***Response to Arguments - 35 USC § 112***

The rejection of claim 4 under 35 U.S.C. 112, second paragraph, is moot in view of Applicant’s cancellation of the claim in the amendment filed 9/23/2006.

The rejection of claims 5, 6, 22, 23, 26, 27 and 31 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicant’s amendment to the claims in the amendment filed 9/23/2006.

Applicant’s arguments, see pages 7-10, filed 10/17/2006, with respect to the rejection of claims 1-4, 5, 6, 14, 22-27, 30 and 31 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, have been fully considered, in view of the amendments to the claims, and are persuasive. The previous rejection of claims 1-4, 5, 6, 14, 22-27, 30 and 31 has been withdrawn.

***Response to Arguments - 35 USC § 102***

The rejection of claims 1-3, 14, 24, 25 and 30 under 35 U.S.C. 102(b) as being anticipated by Bellefroid et al has been withdrawn in view of Applicant's amendment to the claims in the amendment filed 9/23/2006.

The rejection of claims 1-3, 14, 24, 25 and 30 under 35 U.S.C. 102(b) as being anticipated by Lamar et al has been withdrawn in view of Applicant's amendment to the claims in the amendment filed 9/23/2006.

The rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by Klein et al has been withdrawn in view of Applicant's amendment to the claims in the amendment filed 9/23/2006.

The rejection of claims 1 and 14 under U.S.C. 102(b) as being anticipated by Dreyer et al, as evidenced by Curtiss et al, has been withdrawn in view of Applicant's amendment to the claims in the amendment filed 9/23/2006.

***Conclusion***

Claims 2, 3, 5, 6, 22-27 and 36-41 are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Dunston whose telephone number is 571-272-2916. The examiner can normally be reached on M-F, 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer Dunston, Ph.D.  
Examiner  
Art Unit 1636

jad

CELINE QIAN, PH.D.  
PRIMARY EXAMINER

